

What is claimed is:

1. A fiber detector apparatus, comprising:
a hub having a proximal end and a distal end, and having a longitudinal axis through a lumen extending through the proximal and distal ends, wherein the hub is structured to receive a fiber guide tube through the lumen; and
a plurality of electrical contacts that provide fiber identification information of a fiber within the fiber guide tube, the electrical contacts being provided at a leading surface of the proximal end of the hub.
2. The apparatus of claim 1, wherein each of the electrical contacts is in electrical communication with the other electrical contacts.
3. The apparatus of claim 1, wherein the electrical contacts are pins.
4. The apparatus of claim 3, wherein the electrical contacts are retractable pins.
5. The apparatus of claim 1, further comprising a microcircuit connected to the electrical contacts.
6. A fiber guide assembly, comprising:
a fiber guide tube having a proximal end and a distal end; and
a hub having a proximal hub end and a distal hub end, the hub being positioned around the proximal end of the fiber guide tube, wherein the hub includes a plurality of pins at the proximal hub end.
7. The assembly of claim 6, further comprising at least one fiber extending through the fiber guide tube.
8. The assembly of claim 7, wherein the fiber is an optical fiber.
9. The assembly of claim 6, further comprising a microcircuit in contact with the pins.

10. The assembly of claim 7, wherein the number and position of the pins is indicative of characteristics of the at least one fiber.
11. The assembly of claim 6, wherein the pins are retractable pins.
12. The assembly of claim 6, further comprising a material remover at the other end of the fiber guide tube.
13. A method of detecting a fiber attached to a hub, comprising the steps of:
 - (a) providing a hub having a plurality of pins at a proximal end of the hub;
 - (b) placing a circuit board into electrical contact with the pins, wherein the number and position of the pins contacting the circuit board determine a coding sequence indicative of the presence of a fiber; and
 - (c) decoding the coding sequence to determine whether the fiber is attached to the hub, wherein the fiber is detected if the coding sequence reveals a predetermined electrical circuit.
14. The method of claim 13, wherein the hub has at least three pins for determining characteristics of the fiber.
15. The method of claim 14, wherein the fiber characteristics include the fiber's length, shape, diameter, and type.
16. The method of claim 15, further comprising determining a fiber tip's power density.
17. The method of claim 13, wherein the hub includes a microcircuit for storing data.
18. The method of claim 17, wherein the data include the fiber's length, shape, diameter, and type.
19. The method of claim 18, further comprising determining a fiber tip's power density based on the data stored in the microcircuit.